SEQUENCE SUBMISSION

	SEQ ID NO: 1 is mouse 499E9 nucleic acid sequence. SEQ ID NO: 2 is mouse 499E9 amino acid sequence.
	(1) GENERAL INFORMATION:
.10	(i) APPLICANT: Gorman, Daniel M. Mattson, Jeanine D.
	(ii) TITLE OF INVENTION: Mammalian Cell Surface Antigens; Related Reagents
15	(iii) NUMBER OF SEQUENCES: 2
	(iv) CORRESPONDENCE ADDRESS: (A) ADDRESSEE: DNAX Research Institute (B) STREET: 901 California Avenue
20	(C) CITY: Palo Alto (D) STATE: California (E) COUNTRY: USA (F) ZIP: 94304-1104
25	 (v) COMPUTER READABLE FORM: (A) MEDIUM TYPE: Floppy disk (B) COMPUTER: IBM PC compatible (C) OPERATING SYSTEM: PC-DOS/MS-DOS (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
30	(vi) CURRENT APPLICATION DATA:(A) APPLICATION NUMBER: US(B) FILING DATE: 12-DEC-1997(C) CLASSIFICATION:
35	<pre>(vii) PRIOR APPLICATION DATA: (A) APPLICATION NUMBER: US 60/032,846 (B) FILING DATE: 13-DEC-1996</pre>
40	(viii) ATTORNEY/AGENT INFORMATION:(A) NAME: Ching, Edwin P.(B) REGISTRATION NUMBER: 34,090(C) REFERENCE/DOCKET NUMBER: DX0686
45	(ix) TELECOMMUNICATION INFORMATION: (A) TELEPHONE: (650)852-9196

(2) INFORMATION FOR SEQ ID NO:1:

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- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 2191 base pairs

(B) TELEFAX: (650)496-1200

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- 55 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

	5	(ix) FEATURE: (A) NAME/KEY: CDS (B) LOCATION: 1251072													
	10	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:													
		GCCAGGACCT CTGTGAACCG GTCGGGGGCGG GGGCCGCCTG GCCGGGAGTC TGCTCGGCGG	60												
	15	TGGGTGGCCG AGGAAGGAG AGAACGATCG CGGAGCAGGG CGCCCGAACT CCGGGCGCCG													
		CGCC ATG CGC CGG GCC AGC CGA GAC TAC GGC AAG TAC CTG CGC AGC TCG Met Arg Arg Ala Ser Arg Asp Tyr Gly Lys Tyr Leu Arg Ser Ser 1 5 10 15	169												
	20	GAG GAG ATG GGC AGC GGC CCC GGC GTC CCA CAC GAG GGT CCG CTG CAC Glu Glu Met Gly Ser Gly Pro Gly Val Pro His Glu Gly Pro Leu His 20 25 30	217												
a a.	25	CCC GCG CCT TCT GCA CCG GCT CCG GCG CCG CCA CCC GCC GCC TCC CGC Pro Ala Pro Ser Ala Pro Ala Pro Ala Pro Pro Pro Ala Ala Ser Arg 35 40 45	265												
nå.	30	TCC ATG TTC CTG GCC CTC CTG GGG CTG GGA CTG GGC CAG GTG GTC TGC Ser Met Phe Leu Ala Leu Leu Gly Leu Gly Leu Gly Gln Val Val Cys 50 55 60	313												
	35	AGC ATC GCT CTG TTC CTG TAC TTT CGA GCG CAG ATG GAT CCT AAC AGA Ser Ile Ala Leu Phe Leu Tyr Phe Arg Ala Gln Met Asp Pro Asn Arg 65 70 75	361												
		ATA TCA GAA GAC AGC ACT CAC TGC TTT TAT AGA ATC CTG AGA CTC CAT Ile Ser Glu Asp Ser Thr His Cys Phe Tyr Arg Ile Leu Arg Leu His 80 85 90 95	409												
	40	GAA AAC GCA GGT TTG CAG GAC TCG ACT CTG GAG AGT GAA GAC ACA CTA Glu Asn Ala Gly Leu Gln Asp Ser Thr Leu Glu Ser Glu Asp Thr Leu 100 105 110	457												
	45	CCT GAC TCC TGC AGG AGG ATG AAA CAA GCC TTT CAG GGG GCC GTG CAG Pro Asp Ser Cys Arg Arg Met Lys Gln Ala Phe Gln Gly Ala Val Gln 115 120 125	505												
	50	AAG GAA CTG CAA CAC ATT GTG GGG CCA CAG CGC TTC TCA GGA GCT CCA Lys Glu Leu Gln His Ile Val Gly Pro Gln Arg Phe Ser Gly Ala Pro 130 135 140	553												
		GCT ATG ATG GAA GGC TCA TGG TTG GAT GTG GCC CAG CGA GGC AAG CCT Ala Met Met Glu Gly Ser Trp Leu Asp Val Ala Gln Arg Gly Lys Pro 145 150 155	601												

•		GORMAN, et al. 52 DX068	6
		GAG GCC CAG CCA TTT GCA CAC CTC ACC ATC AAT GCT GCC AGC ATC CCA Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Ala Ser Ile Pro 160 170 175	49
	. , 5	TCG GGT TCC CAT AAA GTC ACT CTG TCC TCT TGG TAC CAC GAT CGA GGC Ser Gly Ser His Lys Val Thr Leu Ser Ser Trp Tyr His Asp Arg Gly 180 185 190	97
	10	TGG GCC AAG ATC TCT AAC ATG ACG TTA AGC AAC GGA AAA CTA AGG GTT Trp Ala Lys Ile Ser Asn Met Thr Leu Ser Asn Gly Lys Leu Arg Val 195 200 205	45
·	15	AAC CAA GAT GGC TTC TAT TAC CTG TAC GCC AAC ATT TGC TTT CGG CAT Asn Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys Phe Arg His 210 215 220	93
, m e	20	CAT GAA ACA TCG GGA AGC GTA CCT ACA GAC TAT CTT CAG CTG ATG GTG His Glu Thr Ser Gly Ser Val Pro Thr Asp Tyr Leu Gln Leu Met Val 225 230 235	41
		TAT GTC GTT AAA ACC AGC ATC AAA ATC CCA AGT TCT CAT AAC CTG ATG Tyr Val Val Lys Thr Ser Ile Lys Ile Pro Ser Ser His Asn Leu Met 240 255	89
	25	AAA GGA GGG AGC ACG AAA AAC TGG TCG GGC AAT TCT GAA TTC CAC TTT Lys Gly Gly Ser Thr Lys Asn Trp Ser Gly Asn Ser Glu Phe His Phe 260 265 270	37
	30	TAT TCC ATA AAT GTT GGG GGA TTT TTC AAG CTC CGA GCT GGT GAA GAA Tyr Ser Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ala Gly Glu Glu 275 280 285	35
	35	ATT AGC ATT CAG GTG TCC AAC CCT TCC CTG CTG GAT CCG GAT CAA GAT 103 11e Ser Ile Gln Val Ser Asn Pro Ser Leu Leu Asp Pro Asp Gln Asp 290 295 300	33
	40	GCG ACG TAC TTT GGG GCT TTC AAA GTT CAG GAC ATA GAC TGAGACTCAT 108 Ala Thr Tyr Phe Gly Ala Phe Lys Val Gln Asp Ile Asp 305 310 315	32
		TTCGTGGAAC ATTAGCATGG ATGTCCTAGA TGTTTGGAAA CTTCTTAAAA AATGGATGAT 114	12
		GTCTATACAT GTGTAAGACT ACTAAGAGAC ATGGCCCACG GTGTATGAAA CTCACAGCCC 120)2
	45	TCTCTCTTGA GCCTGTACAG GTTGTGTATA TGTAAAGTCC ATAGGTGATG TTAGATTCAT 126	52
		GGTGATTACA CAACGGTTTT ACAATTTTGT AATGATTTCC TAAGAATTGA ACCAGATTGG 132	2
	50	GAGAGGTATT CCGATGCTTA TGAAAAACTT ACACGTGAGC TATGGAAGGG GGTCACAGTC 138	
		TCTGGGTCTA ACCCCTGGAC ATGTGCCACT GAGAACCTTG AAATTAAGAA GATGCCATGT 144	
	55	CATTGCAAAG AAATGATAGT GTGAAGGGTT AAGTTCTTTT GAATTGTTAC ATTGCGCTGG 150 GACCTGCAAA TAAGTTCTTT TTTTCTAATG AGGAGAGAAA AATATATGTA TTTTTATATA 150	
			-

Asn Ala Gly Leu Gln Asp Ser Thr Leu Glu Ser Glu Asp Thr Leu Pro

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		Asp	Ser	Cys 115	Arg	Arg	Met	Lys	Gln 120	Ala	Phe	Gln	Gly	Ala 125	Val	Gln	Lys
	5	Glu	Leu 130	Gln	His	Ile	Val	Gly 135	Pro	Gln	Arg	Phe	Ser 140	Gly	Ala	Pro	Ala
	10	Met 145	Met	Glu	Gly	Ser	Trp 150	Leu	Asp	Val	Ala	Gln 155	Arg	Gly ·	Lys	Pro	Glu 160
		Ala	Gln	Pro	Phe	Ala 165	His	Leu	Thr	Ile	Asn 170	Ala	Ala	Ser	Ile	Pro 175	Ser
	15	Gly	Ser	His	Lys 180	Val	Thr	Leu	Ser	Ser 185	Trp	Tyr	His	Asp	Arg 190	Gly	Trp
		Ala	Lys	Ile 195	Ser	Asn	Met	Thr	Leu 200	Ser	Asn	Gly	Lys	Leu 205	Arg	Val	Asn
	20	Gln	Asp 210	Gly	Phe	Tyr	Tyr	Leu 215	Tyr	Ala	Asn	Ile	Cys 220	Phe	Arg	His	His
	25	Glu 225	Thr	Ser	Gly	Ser	Val 230	Pro	Thr	Asp	Tyr	Leu 235	Gln	Leu	Met	Val	Tyr 240
		Val	Val	Lys	Thr	Ser 245	Ile	Lys	Ile	Pro	Ser 250	Ser	His	Asn	Leu	Met 255	Lys
	30	Gly	Gly	Ser	Thr 260	Lys	Asn	Trp	Ser	Gly 265	Asn	Ser	Glu	Phe	His 270	Phe	Tyr
		Ser	Ile	Asn 275	Val	Gly	Gly	Phe	Phe 280	Lys	Leu	Arg	Ala	Gly 285	Glu	Glu	Ile
	35	Ser	Ile 290	Gln	Val	Ser	Asn	Pro 295	Ser	Leu	Leu	Asp	Pro 300	Asp	Gln	Asp	Ala
	40	Thr 305	Tyr	Phe	Gly		Phe 310	Lys	Val.	Gln	Asp	Ile 315	Asp				